

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Application Filing Date: Dec. 5, 2003
First Named Inventor: Thomas C. Burke
Attorney Docket: NEX-101-US

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA, 22313-1450

DECLARATION OF THOMAS C. BURKE
PURSUANT TO 37 C.F.R. § 1.132

Sir:

I, Thomas C. Burke, declare as follows:

1. All statements herein made of my own knowledge are true, and all statements made on my information and belief are believed to be true.

2. I am one of the inventors named in the above-referenced patent application.

3. I am currently employed at New England Extrusion, Inc. (hereinafter "NEX"), Turners Falls, Massachusetts, part of the Appleton Performance Packaging Division of Appleton Papers, Inc. Among other aspects, NEX manufactures polyethylene films and polypropylene films. NEX was founded in 1988.

4. My title is Senior Product Development Engineer. I have been employed at NEX for the past 8 years, and have been in the plastic film extrusion industry for the past 21 years. I received a Bachelor of Arts Degree in Biochemistry from Rutgers University.

5. I believe that I am an expert in the field of plastic films, analysis of plastic films and surface chemistry of polyethylene films.

6. I have been participating in and directly observing the plastics film industry for 21 years, and I have detailed knowledge of that industry and of the market for plastic film. I have been an active member in the Society of Plastics Engineers and a board member of the American Society for Plastics.

7. I have reviewed in detail the text and drawings of the above-identified patent application and of the provisional patent application U.S. Serial No 60/431,565 filed Dec. 6, 2002 upon which the present patent application is based and from which it claims priority benefit, including patent claims set forth in the referenced patent applications.

8. I have also reviewed in detail the various Amendments filed in the present patent application, including the Amendment filed Feb. 16, 2007, and the amended patent claims set forth therein.

9. I note that the independent claims of the present patent application, as amended on Feb. 16, 2007, state as follows:

Claim 2. A thin polymer film comprising:

one or a blend of non-polyolefin resins comprising any of polyamide 6, polyamide 6,6, or polyester terephthalate resins, forming a layer having opposed first and second surfaces, and

a migratory additive comprising a blend of secondary amides about 1 part oleyl palmitamide and 1 part stearyl erucamide,

and further comprising between 25 ppm and 5000 ppm of a primary amide of general structure R-CO-NH₂ and between 25 ppm and 5000 ppm of at least one secondary amide of general structure R-CO-NH-R',

wherein the R and R' can include any of erucic, oleic, palmitic, behemic, capric, lauric or stearic functional groups of between 9 to 30 carbon atoms,

such that the ratio of primary amide to secondary amide is between about 1:1 and 1:3.

Claim 3. A thin polyolefin film comprising:

one or a blend of polyolefins, comprising any of LLDPE, LDPE, EVA, POP, mLL, HDPE, polypropylene, or EVOH resins, forming a layer having opposed first and second outer surfaces, and

a migratory additive comprising a blend of secondary amides about 1 part oleyl palmitamide and 1 part stearyl erucamide,

and further comprising between 25 ppm and 5000 ppm of a primary amide of general structure R-CO-NH₂ and between 25 ppm and 5000 ppm of at least one secondary amide of general structure R-CO-NH-R',

wherein the R and R' can include any of erucic, oleic, palmitic, behemic, capric, lauric or stearic functional groups of between 9 to 30 carbon atoms,

such that the ratio of primary amide to secondary amide is between about 1:1 and 1:3.

Claim 7. A thin, multi-layer polyolefin film comprising:
at least 2 layers, having opposed first and second outer surfaces,
with the first outer layer comprising one or a blend of polyolefin(s), and
a second outer layer comprising one or a blend of polyolefin(s), and
a migratory additive comprising a blend of secondary amides comprising about 1 part oleyl
palmitamide and 1 part stearyl erucamide,

at least one layer comprising between 25 ppm and 5000 ppm of a primary amide of general
structure R-CO-NH₂ and between 25 ppm and 5000 ppm of at least one secondary amide of general
structure R-CO-NH-R',

wherein the R and R' can include any of erucic, oleic, palmitic, behemic, capric, lauric or stearic
functional groups of between 9 to 30 carbon atoms,

such that the ratio of primary amide to secondary amide is between about 1:1 and 1:3.

10. Since at least January, 2003, NEX has been selling a number of products formulated in
accordance with one or more of the noted patent claims, and these NEX products, sold under the
following denominations, among others, have achieved outstanding commercial success in the United
States, Mexico and Canada:

- 8087S LLDPE-Pop blended polyethylene film with Controlled COF Technology;
- 5177S LLDPE-EVA blended polyethylene film with Controlled COF Technology;
- K5756 multi-layered polypropylene film with Controlled COF Technology;
- 88716 multi-layered polypropylene film with Controlled COF Technology;
- S4236S and S4237S LLDPE polyethylene films with Controlled COF Technology;
- 6167S Inflex LLDPE polyethylene film with Controlled COF Technology;
- 5096S LLDPE- metallocene PE blended polyethylene film with Controlled COF Technology; and
- 5048S LLDPE-LDPE blended polyethylene film with Controlled COF Technology.

11. In particular, the following are NEX's worldwide sales figures for the above-identified
products in the years 2003, 2004, 2005 and 2006:

2003:	6.8 million pounds
2004:	9.0 million pounds
2005:	12.7 million pounds
2006:	17.3 million pounds

12. NEX is also on pace to sell at least 20 million pounds of the noted products in 2007.

13. I estimate that NEX's market share of our customers' requirements for polyethylene and
polypropylene film products within the relevant product categories, as represented by NEX's sales of the

above-noted products, has increased from approximately 17% in 2003 to 44% today; and I believe that such increase in market share is a direct result of the attributes of the noted products, which derive directly from the claimed invention.

14. Several of NEX's larger customers have found the above-listed products' attributes to be such an improvement over existing film products that they have converted their entire line of packaging sealant films to one or more of the above-listed products.

15. I am also aware that the Director of Technology of one of NEX's customers, a company with a multi-billion dollar presence in the global packaging market, in commenting on one or more of the above-listed NEX products, stated that he believes that NEX has something different and unique that works, after reviewing his company's switch-over to NEX's Controlled COF Technology films, where 2 years earlier, prior to trying them, he had voiced skepticism over NEX's Controlled COF Technology films.

16. In my opinion, and to my knowledge, no other product on the market is formulated in accordance with the noted patent claims; although in 2006, on information and belief, I became aware that a plastics additive concentrate manufacturer attempted unsuccessfully to copy the invention we consider to be covered by the present patent application.

17. In my opinion, and to my knowledge, no other product on the market offers the combination of advantageous characteristics that flow from the formulation recited in the noted patent claims, which are discussed, among other places, in the noted patent application and in the Feb. 16, 2007 Amendment.

18. In my opinion, based on direct observation of the plastics film industry for 21 years, my knowledge of the market for plastic film, my knowledge of plastic additives and films gained from working both in the laboratory and the field with customers, my knowledge of the underlying chemistry of the relevant NEX product and of the present invention as disclosed and claimed in the present patent application, and my detailed review of the claims of the patent application, including as amended on Feb. 16, 2007, the commercial success of the noted NEX products corresponds to the claimed invention and is directly attributable to the formulation recited in the noted patent claims.

19. In my opinion, the commercial success of the noted NEX products has been achieved in a marketplace where the consumer is free to choose on the basis of objective principles and product performance, and that success is not the result of heavy promotion or advertising, a shift in advertising, consumption by purchasers tied to NEX by long-term "requirements" contracts, or other business events extraneous to the merits of the claimed invention.

20. I have also reviewed and studied in detail the referenced cited by the United States Patent and Trademark Office (USPTO) in USPTO Actions in the above-identified patent application, including U.S. Patent No. 4,112,158 (Creekmore et al.).

21. In my opinion, based on my detailed review and study of the noted references and my knowledge of the relevant area of technology, U.S. Patent No. 4,112,158 does not teach, suggest, or render obvious the subject matter of the claims set forth in the Feb. 16, 2007 Amendment; for the reasons set forth in the Feb. 16, 2007 Amendment; and in my opinion, the commercial success achieved by the noted NEX products, formulated in accordance with one or more of the claims of the present application for U.S. Patent, is further evidence of the non obviousness of the noted patent claims.

I DECLARE under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. I understand that willful false statements and the like are punishable by fine or imprisonment or both as set forth in 18 U.S.C. §1001, and may jeopardize the validity of the application or any patent issuing thereon.

Executed on:

May 2nd, 2007

A handwritten signature in cursive script, reading "Thomas C. Burke", written over a horizontal dotted line.

Thomas C. Burke